

REMARKS/ARGUMENTS

It is believed that this Amendment, in conjunction with the following remarks, place the application in immediate condition for allowance or at least presents the claims in better form for consideration on Appeal. Claims 1-7, 9-54, 56-59 and 72-75 are pending in the present application. Claims 1, 13, 20, 29, 35, 40, and 48 are independent claims. Claims 72-75 are added by this Amendment.

Non-Compliant Information Disclosure Statement (IDS)

Applicants note the IDS informalities identified on page 2 of the Office Action and have provided a supplemental IDS submitted herewith to address the informalities.

In the supplemental IDS, item (1) includes the English Abstract and the Chinese language document for CN1186401. The information that caused item (1) to be listed is submitted as item (7), a translation of an Office Action from the Chinese patent office in Application No. 03814391.7 (associated with U.S. patent application 10/516,327).

Item (2) includes the English abstract and French language document for EP0860953. The information that caused item (2) to be listed is submitted as item (10), the Supplementary European Search Report for EP Application No. 03759235.9, (associated with U.S. patent application 11/340,838).

Items (3) to (5) are the English abstracts of the three references. The information that caused items (3) to (5) to be listed is submitted as item (9), a translation of an Office Action from the Japanese patent office in Application No. 2004-541532 (associated with U.S. patent application 11/340,838).

Item (6) includes the English Abstract and the Japanese language document for JP 2001-244864. The information that caused item (6) to be listed is submitted as item (9) as well. Item (6) is believed to correspond to US20010018328 and U.S. Patent No. 6,728,541, previously cited.

Item (8) includes the English translation of the office action as well as the Spanish language document. Item (8) is an office action from the Mexican patent office for application no. PA/u/2004/011588 (associated with U.S. application 10/516,327).

Allowable Subject Matter

Applicants note with appreciation the indication on page 16 of the Office Action that claims 20-23, 29-30 and 40-43 remain allowed.

35 U.S.C. §102(e) Lau

Claims 1-7, 13-19, 24-28, 31 and 48-54 stand rejected under 35 U.S.C. §102(e) as being unpatentable over Lau (US 6,690,657). The Applicants respectfully traverse this art grounds of rejection.

Lau was discussed by the Applicants in detail within the 6/10/2009 Amendment, which is hereby incorporated by reference for the sake of brevity. The Applicants now wish to address the manner in which the repeaters disclosed by Lau operate; specifically, which frequencies are received and re-transmitted by the repeaters in Lau.

A first example of repeater-operation is described with respect to FIGS. 4 and 5 of Lau, whereby Lau states “that two substantially non-interfering channels are available” such that “[r]epeters 68 and 78 have a single task to perform: they receive signals on a first channel (CH1) and retransmit these signals on a second channel (CH2)” (e.g., see Col. 5, lines 29-34 of Lau). A second example of repeater-operation is described with respect to FIGS. 6 and 7 of Lau, whereby Lau states “FIGS. 6 and 7 assume that three substantially non-interfering channels, CH1, CH2, and CH3, are available” such that “[r]epeters 68 and 78 can receive signals on both CH1 and CH2, and have the capability to retransmit a signal received on CH1 on CH2, and a signal received on CH2 on CH3” (e.g., see Col. 5, lines 29-34 of Lau).

Generally, the repeaters are not permitted to transmit on CH1, since this is the frequency upon which the T/R modules transmit (otherwise, the repeaters would interfere with the T/R modules). This is why the repeaters repeat CH1 on CH2, or CH2 on CH3, in FIGS. 6 and 7. Lau goes on to state that repeaters that are known not to be in range of a T/R module can ‘re-use’ a channel such as CH1 (e.g., Col. 6, lines 24-37 of Lau). This essentially means that if a repeater is not receiving any signals on CH1, the repeater can be instructed to re-transmit on CH1 because there are no other CH1 signals with which to interfere.

By the present Amendment, independent claim 1 has been amended to recite “establishing a first radio frequency (RF) link and a second RF link, wherein the first RF link is associated with signals that are received on a first frequency channel and re-transmitted by the

frequency translating repeater on a second frequency channel, and wherein the second RF link is associated with signals that are received on the second frequency channel and re-transmitted by the frequency translating repeater on the second frequency channel”, with similar amendments also being made to independent claims 13, 35 and 48. Accordingly, the method of claim 1 now recites a certain reciprocity with the frequencies being repeated on the respective RF links, such that signals on one incoming frequency are repeated on another frequency, and vice versa. For support of this Amendment, the Applicants direct the Examiner at least to [0022] of the published Specification, which states “[p]ackets transmitted on a first frequency channel 201 from AP 100 are received at repeater 200 and re-transmitted ... on a second frequency channel 202” and also “repeater unit 200 detects the presence of a transmitted return packet on second frequency channel 202 from client unit 105, and is preferably configured to receive the packet on second frequency channel 202, and to retransmit the data packet to, for example AP 100, on first frequency channel 201”.

This operation does not occur in Lau. As noted above, in Lau’s description of FIGS. 4 and 5, signals on a first channel (CH1) are repeated on a second channel (CH2). However, the repeaters do not have authority to transmit on CH1, such that signals received at the repeaters on the second channel (CH2) are not repeated or re-transmitted onto the first channel (CH1). Similarly, as noted above with respect to Lau’s description of FIGS. 6 and 7, in addition to repeating CH1-signals on CH2, the repeaters also repeat CH2-signals on a third channel (CH3). This is clearly different than repeating the CH2 signals on CH1. The repeaters only use CH1 for signal repetitions or re-transmission in the event that no signals are received on CH1 at the repeater (e.g., Col. 6, lines 24-37 of Lau). By implication, this means that if a repeater receiving signals on CH2 or CH3 and is permitted to re-transmit on CH1, then no signals on CH1 would ever be received at that particular repeater. Accordingly, there does not appear to be a scenario disclosed by Lau in which signals on a first frequency are repeated onto a second frequency while signals on the second frequency are also repeated onto the first frequency.

For this reason, the Applicants respectfully submit that Lau cannot disclose or suggest the limitations of independent claims 1, 13, 35 and 48 as presently amended. As such, claims 2-7, 9-10, 12, 14-19, 24-28, 31, 49-54, 56-57 and 59, dependent upon independent claims 1, 13 and 48, respectively, are likewise allowable over Lau at least for the reasons given above with respect to the independent claims.

Applicant respectfully requests that the Examiner withdraw this art grounds of rejection.

35 U.S.C. §103(a) Lau

Claims 32-39 and 44-47 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Lau. Applicant respectfully traverses this art grounds of rejection.

For the reasons discussed in the preceding section, Applicant respectfully submits that independent claims 1, 13 and 48 are allowable over Lau. For similar reasons, Applicant respectfully submits that independent claim 35 is also allowable over Lau. As such, claims 32-34, 36-39 and 44-47, dependent upon independent claims 13 and 35, respectively, are likewise allowable over Lau.

Applicant respectfully requests that the Examiner withdraw this art grounds of rejection. Reconsideration and issuance of the present application is respectfully requested.

CONCLUSION

In light of the amendments contained herein, Applicant submits that the application is in condition for allowance, for which early action is requested.

Please charge any fees or overpayments that may be due with this response to Deposit Account No. 17-0026.

Respectfully submitted,

Dated: July 29, 2010

By: 

Linda G. Gunderson, Ph.D.
Reg. No. 46,341

QUALCOMM Incorporated
Attn: Patent Department
5775 Morehouse Drive
San Diego, California 92121-1714
Telephone: (858) 651-7351
Facsimile: (858) 658-2502